Fecha del CVA	16/01/2024

Parte A. DATOS PERSONALES

Nombre	Javier		
Apellidos	Casas Requena		
Sexo	No Contesta	Fecha de Nacimiento	
DNI/NIE/Pasaporte			
URL Web	https://www.linkedin.com/in/javier-casas-requena-5b6635110		
Dirección Email			
Open Researcher and Contributor ID (ORCID)	0000-0002-6413-8127		

A.1. Situación profesional actual

Puesto	Profesor Ayudante Doctor		
Fecha inicio	2022		
Organismo / Institución	Universidad de Valladolid		
Departamento / Centro	Bioquímica Y Biología Molecular y Fisiología / Facultad de Medicina y Ciencias de la Salud		
País		Teléfono	
Palabras clave	241200 - Inmunología		

A.2. Situación profesional anterior (incluye interrupciones en la carrera investigadora - indicar meses totales, según texto convocatoria-)

Periodo	Puesto / Institución / País
2020 - 2022	Personal Técnico de Apoyo / Consejo Superior de Investigaciones Científicas
2016 - 2019	Investigador Postdoctoral/Profesor / Universidad de Valladolid
2015 - 2016	Investigador Postdoctoral / Consejo Superior de Investigaciones Científicas
2013 - 2014	Postdoctoral Research Associate / National University of Singapore / Singapur
2011 - 2013	Research Associate / The Scripps Research Institute / Estados Unidos de América
2009 - 2011	Postdoctoral Fellow / The Scripps Research Institute / Estados Unidos de América
2006 - 2007	Predoctoral Fellow / Instituto de Biología y Genética Molecular
2004 - 2006	Lab Technician / Instituto de Biología y Genética Molecular

A.3. Formación académica

Grado/Master/Tesis	Universidad / País	Año
Biotecnología: Aplicaciones Biomédicas	Universidad de Valladolid / España	2008
Licenciado en Biología	Universidad SEK / España	2003

Parte B. RESUMEN DEL CV

My research career early on focused on the discovery of key aspects of innate immunity through fluorescence microscopy. During the initial stages of my doctoral studies, I investigated the regulation mechanisms of cytosolic group IVA phospholipase A2 (cPLA2), a key enzyme in the production of important inflammatory mediators known as eicosanoids. As a result of this period, I published 7 peer-reviewed articles in high-impact scientific journals within the field, with 4 of them as the first author.

After completing my Ph.D., I was awarded a postdoctoral mobility grant from the former Ministry of Science and Innovation to continue my training as a Molecular Biologist/Immunologist at the Scripps Research Institute in La Jolla, CA, USA, in Professor Nicholas Gascoigne's laboratory.

This marked a significant change from my previous background, but the lab provided an exceptional opportunity to continue learning and enhance my skills in fluorescence microscopy techniques, including FRET and TIRF. During this stage, I published 6 peer-reviewed articles, this time in general high-impact journals. One of them, published in Nature, defined the role of a new protein, Themis, implicated in thymocyte development; and another in the journal Nature Communications, whose impact factor continues to rise, elucidated how TCR response is triggered by Lck not associated with the CD8 co-receptor.

Upon completion of the fwllowship, I was hired as a permanent member of Dr. Gascoigne's lab and took charge of the Microscopy Unit. Subsequently, I moved to the University of Singapore, where I collaborated in setting up a new laboratory and its microscopy unit. This involved assembling and disassembling a fast-acquisition FRET microscope for live cell imaging, relocated from La Jolla, and designing technical requirements for a TIRF microscope with super-resolution capabilities in collaboration with Olympus engineers.

Upon returning to Spain, I decided to continue my education by obtaining accreditation as Assistant Professor, Contracted Doctor, and Private University by ANECA, along with B-level work certificates and C-level animal experiment design certificates according to Spanish legislation. I contributed to securing a €50,000 project in collaboration with a private fertility clinic in Valladolid. I won a research/teaching contract through a competitive program, similar to the Juan de la Cierva program, at the University of Valladolid, affiliated with the Department of Biochemistry, Molecular Biology, and Physiology, where I investigated the role of DAG in inflammatory processes, leading to the publication of my first corresponding author article. I also taught across Biochemistry and several courses in the Biotechnology Master's program.

The Junta de Castilla y León, through the IBGM, granted me an intramural project to demonstrate support for my work. Subsequently, I received a contract from the competitive Technical Support Staff program for the IBGM microscopy service. Currently, I have secured a position as Assistant Professor at the University of Valladolid, in the Department of Biochemistry and Molecular Biology and Physiology, where I aim to establish my own research line and form new research group

Parte C. LISTADO DE APORTACIONES MÁS RELEVANTES

C.1. Publicaciones más importantes en libros y revistas con “peer review” y conferencias

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores. Si aplica, indique el número de citaciones

1 **Artículo científico**. (1/2) Casas J (AC); Balsinde J. 2022. Phosphorylation of cPLA2α at Ser505 Is Necessary for Its Translocation to PtdInsP2-Enriched Membranes. Molecules. MDPI. 27-2347. https://doi.org/10.3390/molecules27072347

2 **Artículo científico**. Manso JA; Marcos T; Ruiz-Martín V; et al; Alonso A; (4/9) Casas J. 2022. PSTPIP1-LYP phosphatase interaction: structural basis and implications for autoinflammatory disorders. Cellular and Molecular Life Sciences. Springer Nature. 79(2)-131.

3 **Artículo científico**. (1/5) Casas J (AC); Meana C; López-López JR; Balsinde J; Balboa MA. 2021. Lipin-1-derived Diacylglycerol Activates Intracellular TRPC3 Which Is Critical for Inflammatory Signaling. Cellular and Molecular Life Sciences. Springer Nature.

4 **Artículo científico**. Casas J; Meana C; López-López JR; Balsinde J; Balboa MA. 2021. Intracellular pool of DAG-activated TRPC3 channels are essential for TLR4 activation. BiorXiv.

5 **Artículo científico**. Wei Q; Brzostek J; Sankaran S; et al; Gascoigne NR; (4/9) Casas J. 2020. Lck bound to corecepor is less active than free Lck. PNAS. National Academy of Sciences. 117-27, pp.15809-15817.

6 **Artículo científico**. Rubio J M; Astudillo A M; (3/4) Casas J; Balboa M A. 2018. Regulation of Phagocytosis in Macrophages by Membrane Ethanolamine Plasmalogens. Frontiers Immunology. 9, pp.1723.

7 **Artículo científico**. (1/11) Casas J; Brzostek J; Zarnitsyna V; et al; Gascoigne N. 2014. Ligand engaged TCR is triggered by Lck not associated with CD8 coreceptor. Nature Communications. Nature Publishing Group (Macmillan Publishers). 5-doi: 10.1038/ncomm66. ISSN 2041-1723.

8 **Artículo científico**. Kong K; Fu G; Zhang Y; et al; Altman A; (4/11) Casas J. 2014. Protein Kinase Cn Controls CTLA-4-Mediated Regulatory T Cell Function. Nature Immunology. Nature Publishing Group (Macmillan Publishers). 5, pp.465-472. ISSN 1529-2908.

9 **Artículo científico**. Fu G; (2/12) Casas J; Rigaud S; et al; Gascoigne N. 2013. Themis sets the signal threshold between positive and negative selection in T-cell development.Nature. Nature Publishing Group (Macmillan Publishers). 504-7480, pp.441-445. ISSN 0028-0836.

10 **Artículo científico**. Hoerter J; Brzostek J; Artyomov M; et al; Gascoigne N; (5/12) Casas J. 2013. Coreceptor affinity for MHC defines peptide specificity requirements for TCR interaction with coagonist peptide-MHC.Journal of Experimental Medicine. The Rockefeller University Press. 210-9, pp.1807-1821. ISSN 0022-1007.

11 **Artículo científico**. Gascoigne N; (2/3) Casas J; Brzostek J. 2011. Initiation of TCR phosphorylation and signal transduction. Frontiers in Immunology. 7-2.

12 **Artículo científico**. Fu G; Hu J; Niederberger-Magnenat N; et al; Gascoigne N; (5/16) Casas J. 2011. Protein kinase Cn is required for T cell activation and homeostatic proliferation.Science Signaling. American Association for the Advancement of Science. 4-202. ISSN 1937-9145.

13 **Artículo científico**. (1/5) Casas J; Valdearcos M; Pindado J; Balsinde J; Balboa MA. 2009. The cationic cluster of group IVA phospholipase A2 (Lys488/Lys541/Lys543/Lys544) is involved in translocation of the enzyme to phagosomes in human macrophages.Journal of Lipid Research. American Society for Biochemistry and Molecular Biology Inc.. 51-2, pp.388-399. ISSN 0022-2275.

14 **Artículo científico**. Gubern A; Barceló-Torns M; (3/9) Casas J; et al; Claro E. 2008. Lipid droplet biogenesis induced by stress involves triacylglycerol synthesis that depends on group VIA phospholipase A2.Journal of Biological Chemistry. American Society for Biochemistry and Molecular Biology Inc.. 284-9, pp.5697-5708. ISSN 0021-9258.

15 **Artículo científico**. Gubern A; (2/10) Casas J; Barceló-Torns M; et al; Claro E. 2008. Group IVA phospholipase A2 is necessary for the biogenesis of lipid droplets.Journal of Biological Chemistry. American Society for Biochemistry and Molecular Biology Inc.. 283-41, pp.27369-27382. ISSN 0021-9258.

16 **Artículo científico**. Ruiperez V; (2/4) Casas J; Balsinde J; Balboa MA. 2007. Group V phospholipase A2-derived lysophosphatidylcholine mediates cyclooxygenase-2 induction in lipopolysaccharide-stimulated macrophages.Journal of Immunology. American Association of Immunologists. 179-1, pp.631-638. ISSN 0022-1767.

17 **Artículo científico**. (1/6) Casas J; Gijón MA; Vigo AG; Crespo MS; Balsinde J; Balboa MA. 2006. Overexpression of cytosolic group IVA phospholipase A2 protects cells from Ca2+-dependent death.Journal of Biological Chemistry. American Society for Biochemistry and Molecular Biology Inc.. 281-9, pp.6106-6116. ISSN 0021-9258.

18 **Artículo científico**. (1/6) Casas J; Gijón MA; Vigo AG; Crespo MS; Balsinde J; Balboa MA. 2005. Phosphatidylinositol 4,5-bisphosphate anchors cytosolic group IVA phospholipase A2 to perinuclear membranes and decreases its calcium requirement for translocation in live cells.Molecular Biology of the Cell. American Society for Cell Biology. 17-1, pp.155-162. ISSN 1059-1524.

19 **Artículo científico**. 2022. Altered Surface Expression of Insulin-Degrading Enzyme on Monocytes and Lymphocytes from COVID-19 Patients Both at Diagnosis and after Hospital Discharge. International Journal of Molecular Sciences. MDPI. https://doi.org/10.3390/ijms231911070

20 **Artículo científico**. (1/7) Casas J; Meana C; Esquinas E; Valdearcos M; Pindado J; Balsinde J; Balboa MA. 2009. Requirement of JNK-mediated phosphorylation for translocation of group IVA phospholipase A2 to phagosomes in human macrophages.Journal of Immunology. American Association of Immunologists. 183-4, pp.2767-2774. ISSN 0022-1767.

C.3. Proyectos o líneas de investigación

1 **Proyecto**. T-Cell Signaling in Development and Activation. (National University of Singapore). 01/08/2013-26/02/2016.
2 **Proyecto**. INTERMOLECULAR INTERACTIONS IN THE IMMUNOLOGICAL SYNAPSE (R01 GM065230). National Institute of General Medical Sciences. (The Scripps Research Institute). 01/01/2009-31/12/2012. 885.952 €.
3 **Proyecto**. THEMIS REGULATION OF THYMOCYTE DEVELOPMENT (R56). National Institute of Allergy and Infectious Diseases. (The Scripps Research Institute). 15/05/2010-30/04/2012. 346.587 €.
4 **Proyecto**. A NOVEL PROTEIN REGULATING THYMOCYTE DEVELOPMENT (R01 A1073870). National Institute of Allergy and Infectious Diseases. (The Scripps Research Institute). 15/05/2009-30/04/2011. 694.637 €.
5 **Proyecto**. Inflamación y obesidad: dos procesos controlados por un mismo enzima, la fosfatasa de ácido fosfatídico dependiente de magnesio. MINISTERIO DE EDUCACION Y CIENCIA. (Instituto de Biología y Genética Molecular). 19/01/2010-31/12/2010. 24.636 €.
6 **Proyecto**. Mecanismos de Señalización bioquímica en la reacción inflamatoria; un punto de partida para el diseño de terapéuticas específicas (CSI01-C05). Junta de Castilla y León. (Instituto de Biología y Genética Molecular). 2005-2007. 103.700 €.
7 **Contrato**. ROLE OF TRPC3 CHANNELS IN MACROPHAGE ACTIVATION Junta de Castilla y León. Desde 01/07/2019. 4.000 €.
8 **Contrato**. PAPEL DE LAS PROSTAGLANDINAS DURANTE LA IMPLANTACIÓN EMBRIONARIA Clinica de Fertilidad Recoletos. Javier Casas Requena. 01/11/2015-01/09/2016. 50.000 €.